

✓ Internal Revenue Service

memorandum

CC:TL-N-2569-88

Brl:CEButterfield

date: FEB 2 1988

to: District Counsel, Cleveland
Attn: Rick Bloom

CC:CLE

from: Director, Tax Litigation Division CC:TL

subject: [REDACTED]

This responds to the request for technical advice, concerning the issue set forth below, originally referred informally.

ISSUE

What is the correct placed in service date for the [REDACTED] facility. Rira No. 0168.00-00

CONCLUSION

The Revenue Agent correctly determined the placed in service date of the [REDACTED] as [REDACTED], the date on which the facility was synchronized into the main power grid of [REDACTED].

FACTS

The [REDACTED] and [REDACTED], [REDACTED], and [REDACTED] are all participants in the construction of a [REDACTED] known as the [REDACTED], Units [REDACTED] and [REDACTED]. [REDACTED] is the representative of the group, and the contracting party. Construction of the two units was authorized by the Atomic Energy Commission (now the Nuclear Regulatory Commission or NRC) on [REDACTED]. Unit [REDACTED] was constructed, tested and synchronized by [REDACTED], and all parties agreed that [REDACTED] was the year it was placed in service.

Several factors were agreed on as determining the placed in service date in [REDACTED]. The full operating license from the NRC was granted on [REDACTED]. Criticality [REDACTED] nuclear chain reaction) was achieved on [REDACTED]. Synchronization into the main power grid took place on [REDACTED]. Critical testing of the unit and its components at low power levels had been completed prior to the issuance of the full power operating licence.

The single most salient fact that distinguishes [REDACTED]

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from [REDACTED] is that the former is the subject of a safe harbor lease with [REDACTED]. For the purposes of this memorandum we are assuming that all the criteria of the safe harbor lease provisions of I.R.C. § 168(f)(8) have been met except for the 90 day window -- the requirement that the qualified section 38 property be placed in service within three months of the signing of the lease. This 90 day window is found in section 168(f)(8)(D)(ii) of the Internal Revenue Code of 1954. (The safe harbor provisions have been substantially repealed for tax years after 1983 by TEFRA in 1982, and the Tax Reform Act of 1986.) When the same four factors are applied to [REDACTED] that were used to determine the placed in service date of [REDACTED] the resulting date is [REDACTED]. Because the safe harbor lease was not executed until [REDACTED], the taxpayer is urging a later placed in service date. The date would have to be later than [REDACTED] (the 90-day window opens [REDACTED]), for the lease to fall within the safe harbor requirements. Taxpayer will apparently concede that the lease transaction lacks the necessary economic substance to pass muster outside the safe harbor of section 168(f).

[REDACTED], as [REDACTED], was constructed by [REDACTED] under contract to the participants. It was constructed on a site owned by the participants, and the site was at all times under the control of the participants. The contract between [REDACTED] and [REDACTED] provided that title to any equipment or materials furnished by [REDACTED] passed to [REDACTED] point of shipment, freight prepaid. Risk of loss was to pass to [REDACTED] at arrival on board carrier at site. Insurance for the conduct of [REDACTED] employees was carried by [REDACTED], but all other insurance, including nuclear insurance and insurance relating to the materials and equipment during and after construction, was carried by [REDACTED].

Initial fuel loading of [REDACTED] took place on [REDACTED]. By that time cold system and hot system testing had been successfully completed. Initial criticality was reached on [REDACTED]. Low power testing (up to 5% of the [REDACTED] rated capacity) was successfully completed by [REDACTED]. All pre-operational critical tests took place before [REDACTED] 1981, which is the date on which the full power operating licence was granted by the NRC for Unit 2. The Turbo generator was subsequently placed on line, and the facility was synchronized into the power grid on [REDACTED]. Subsequently the unit began regular production and distribution of power at levels above 5%.

Synchronization is the process by which the power produced by a generating facility is fed into the supply system of the utility for distribution beyond the plant itself. A plant may absorb a certain amount of its own power in order to power

itself. However above low levels more power is produced by the plant than can be safely absorbed by it, and synchronization must occur. The original pre-operating tests were conducted at below 5% of rated capacity so that they could be conducted off-grid. Subsequent to the granting of the full power operating license the facility could proceed to be synchronized into the main grid and to produce electricity at levels from [REDACTED] up to full rated capacity.

The taxpayer has asserted that the proper placed in service date for [REDACTED] is the date on which the entire facility was fully and formally accepted, and operating at full rated capacity. This did not take place until [REDACTED], within [REDACTED] days of the execution of the [REDACTED] lease.

LEGAL ANALYSIS

The safe harbor leasing provisions of section 168(f) were enacted as part of ERTA, in 1981. Safe harbor leases allow marginally profitable taxpayers who cannot make full use of investment credits and depreciation deductions to "sell" these benefits to a nominal purchaser/lessor. If a lease qualifies under the safe harbor, the underlying economic substance of the transaction will not prevent the lease from being recognized. To qualify under the provision, the property subject to the lease had to be placed in service within three months of the signing of the lease. Temp. Treas. Reg.

§ 5(c).168(f)(8)-6(b)(2) defines placed in service as "placed in a condition or state of readiness and availability for a specifically assigned function. If an entire facility is leased under one lease, property which is part of the facility will not be considered placed in service under this rule until the entire facility is placed in service." A similar definition is found in the regulations under section 46. Treas Reg. § 1.46-3(d)(iii) states that equipment is placed in service that is "operational but is undergoing testing to eliminate any defects."

Besides these general considerations, the Service has published several Revenue Rulings on the issue of when an electrical generating facility, and in some cases particularly a nuclear one, is placed in service. These rulings consistently look to the same few factors. Necessary licensing must be in place, critical testing must be complete, the facility must be in the control of the taxpayer, and synchronization must have taken place. At the earliest date on which all of these factors are present, the facility is said to have been placed in service.

Rev. Rul. 76-256, 1976-2 C.B. 46, deals with the placed in service date of a coal-fired electric generating plant. The ruling concludes that the facility was placed in service on the date it was placed in the utility's control, and was

synchronized into the power grid, and daily operation had begun, even though further testing was necessary to eliminate latent defects, and the height of a dam would have to be increased to handle future waste disposal. Critical testing was complete, and licenses for full operation had been granted by this time also. The ruling does not state whether or not the daily operation of the facility was at or near rated capacity. No implication could be drawn that operation at rated capacity was a necessary prerequisite to being placed in service.

Rev. Rul. 76-428, 1976-2 C.B. 47, discusses the placed in service date of a nuclear generating unit for depreciation and investment credit purposes. That ruling states that the nuclear unit was considered placed in service when it was physically and legally in control of the utility, and was fully operational, regardless of the fact that it was still undergoing further testing to eliminate latent defects. To be in the control of the owners, title, risk of loss and liability must have passed from the contractor to them. Fully operational refers to the same standards enumerated in Rev. Rul. 76-256: critical testing of components was complete; the unit was in the control of the taxpayer; synchronization had taken place to allow for the regular production of energy for distribution to customers. Operation at rated capacity is not an express requirement.

Rev. Rul. 79-203, 1979-2 C.B. 94, discusses the placed in service date of a coal fired steam generator, which was found to be placed in service even though certain pollution control equipment was not fully operational -- the Environmental Protection Agency had allowed the plant to commence operating without the pollution control equipment. The unit had been subject to successful pre-operational testing, synchronization had taken place, the regulatory agencies had authorized operation, and electricity had been delivered for sale to customers.

Similarly, Rev. Rul. 79-98, 1979-1 C.B. 103, discusses the placed in service date of a nuclear generating unit, and follows the same analysis to the same conclusion. The facility in Rev. Rul. 79-98 was constructed by a contractor for the taxpayer. Liability, title and risk of loss were with the subcontractor until acceptance by the taxpayer. Testing was carried out by the start-up team of the taxpayer, but under the direction of the contractor, and as the responsibility of the contractor. Insurance was carried by the contractor until acceptance. The taxpayer agreed to accept following successful completion of pre-operational, fuel loading and start-up tests, and a 100 hour continuous run. By May 25, 1974, criticality had been achieved, critical testing was complete, and the unit was synchronized. The unit was able to operate (and the Rev. Rul. specifies that it operated at rated capacity) without failure, although formal

acceptance had not taken place, and testing was continuing. May 25, 1974, was nonetheless found to be the placed in service date.

Unlike its predecessors, Rev. Rul. 79-98 makes specific mention of operation at rated capacity. This aspect of the Ruling was subject to later clarification, in Rev. Rul. 84-85, 1984-1 C.B. 11. Rev. Rul. 84-85 involved a solid waste disposal facility which was producing steam from solid waste since the firing of the first boiler in July. The steam was produced continuously, and sold, although the facility experienced some technical difficulties that prevented its operation at rated capacity. Rev. Rul. 84-85 makes it clear that while operation at rated capacity may be an indication of operational status, it is not a prerequisite for that status.

A number of Private Letter Rulings discuss the placed in service dates of electrical generating facilities. In a case bearing a marked similarity to this one, PLR 7920006 discusses the appropriate date for a nuclear facility constructed by the taxpayer. Control of the site rested with the taxpayer at all times, and title and risk of loss for generator components shifted to the taxpayer f.o.b. factory, as in the instant case. Critical testing and synchronization had been accomplished and the necessary licenses were in place. The facility operated at 12 percent of rated capacity a year after synchronization, and was unable to operate at rated capacity. The PLR finds that because the ownership of the units was with the taxpayer, the placed in service date hinged on the availability of the units for production of electricity rather than on formal acceptance dates. The same reasoning is applicable to the [REDACTED].

A similar result was reached by PLR 8525082, in which a nuclear generating facility was found to be placed in service on the date of synchronization. At that time the necessary licenses were in place, critical tests had been performed, and control was in the hands of the taxpayer. The unit was brought up to 30% of rated capacity shortly after synchronization and up to 50% over the course of the following year. Testing at sustained output levels above the low-level off-grid testing was continuing during the period following synchronization, but was not found to delay the date placed in service. The NRC approved a three-step licensing process for this plant, [REDACTED] applied to the [REDACTED]. The three steps were fuel loading, off-grid low power testing up to 5%, and operation above 5%, after synchronization, under a full operating license. The placed in service date was found to be synchronization, at the completion of low power testing, just as it was in the [REDACTED] and [REDACTED]. Consistent results may also be found in PLR 8208146.

The taxpayer in this case is attempting to argue that the

Service made an argument in the case of Consumers Power Co. v. Commissioner, 89 T.C. No. 49 (September 30, 1987), which the court sustained, that is inconsistent with the foregoing, and which supports their claim of the later placed in service date. Consumers Power involved the placed in service date of a pumped storage hydroelectric generating facility, the Ludington plant. Unlike the present case, the Ludington plant was constructed under the control of a contractor, Ebasco, and not by the taxpayer. The testing sequence was determined by the parties and not by the NRC. The agreements between the contractor and the taxpayer provided for four phases of testing. Phases I and II were considered pre-operational, critical testing. Phases III and IV were sustained output, operational testing. Title and risk of loss of the facility shifted from the contractor and its subcontractor (Hitachi, which supplied the turbines and motors) at the successful completion of Phase II testing. Until that time title, risk of loss, and insurance coverage were borne by Ebasco and Hitachi.

In the case of the turbines and motors supplied by Hitachi, the agreements provided that Hitachi was responsible for the performance of start-up tests, mechanical runs, load rejection tests and the successful post-synchronization operation of the equipment. Until these pre-operational tests were successfully completed risk of loss of the equipment rested with Hitachi. Ebasco and Consumers Power would then preliminarily accept the units and the risks would shift. At that point, which occurred at the successful completion of Phase II testing, Hitachi's three year warranty coverage would begin to apply. Final acceptance by Consumers Power of the entire facility from Ebasco would not occur under the agreement until the end of sustained output testing, in phases III and IV.

Phase II testing required that the turbines be successfully operated with the reservoir at three pond levels: low pond (880 feet above mean sea level); mid pond (910 feet above mean sea level) and high pond (942 feet above mean sea level). Not until the successful completion of testing at all three pond levels would the pre-operational testing be concluded, and title and risk of loss shift. Low pond testing was completed without incident by 11/22/72. Mid pond testing was completed by 11/29/72. It was anticipated that high pond testing would be complete in the week of 12/11/72, and that Phase III testing would then commence, with risk of loss passing to Consumers Power. In anticipation of this event, Consumers obtained (for the first time) insurance coverage against the risk, to be effective 12/10/72. While the turbines were pumping to bring the reservoir to high pond levels, a malfunction occurred, resulting in a shut down. The high pond Phase II tests were not actually completed until 1/16/73. The following day Ebasco accepted the turbines and motors from Hitachi, and Consumers Power approved the acceptance.

In Consumers Power's construction report to the Federal Energy Regulatory Commission (FERC) they gave the placed in service date of the Ludington plant as 1/18/73. In their report to shareholders they gave the same date. Phase III and IV testing were successfully concluded subsequent to the preliminary acceptance of the facility. Rated capacity was achieved in October of 1973, and final plant acceptance took place subsequently. However Consumers Power took depreciation deductions for the facility based on a 1972 placed in service date.

The necessary factors for the plant to have been placed in service were synchronization, the granting of a full operating license, critical testing and the transfer of control to the taxpayer. Synchronization and the granting of a license had taken place by 1972. However, critical testing at high pond levels, and the subsequent transfer of control did not take place until January 1973. Therefore, the government argued for a later placed in service date. Although there is some general use of terms that have specific industry meanings in both the Consumers Power brief, and the opinion, the government did not attempt to argue that operation at rated capacity, or final plant acceptance were necessary prerequisites for the Ludington facility to be placed in service. Hercules makes much of the language in the Consumers Power brief referring to synchronization with the intent to produce sustained electrical output, and the date on which the plant became commercially operable. There is less to this argument than meets the eye.

The use of the term sustained output, and the nontechnical application of the term synchronization in the government's reply brief should not be taken to imply that the government advocated a placed in service date based on operation at full rated capacity, the completion of Phase IV testing, or final plant acceptance. In point of fact, Phase II testing is denominated pre-operational testing in the brief, and the government urged the successful completion of this testing period as the placed in service date. The selection of such a date was not an arbitrary exercise of discretion, but based on the legal effect of the documents that Consumers Power, at arms length, had concluded with Ebasco. Legal title and control, which have consistently been held to be necessary prerequisites to placement into service, were not achieved until the successful completion of Phase II testing. Due to a malfunction, Phase II testing was not completed until January of 1973, at which time preliminary acceptance (referred to in the Slip Opinion at pg. 22 as "formal" but not final acceptance) took place. Consumers Power took a similar view of the chronology in their reports to the FERC and their shareholders.

In contrast to the construction under contract in Consumers Power, [REDACTED] was constructed by the utility. Control of the site was never truly out of the hands of [REDACTED],

and so states the contract. Title of equipment passed f.o.b. shipper, freight prepaid. Risk of loss passed on arrival on site, on board shipper. Insurance was carried by [REDACTED]. Thus, control, one of the determining factors in [REDACTED] (Slip. Op. at [REDACTED] -- "responsibility and control of [REDACTED] remained with the contractor until petitioner formally accepted"), was at all times in the hands of [REDACTED] during the construction of [REDACTED].

In addition, the tests being carried out at the Ludington plant when the malfunction occurred were pre-operational, critical tests. No testing at high pond levels had yet taken place when the turbine malfunctioned and the plant was shut down. [REDACTED] finds significance in the fact that the Ludington plant operated at above 80% rated capacity during mid-pond tests. That is not the critical point. What prevented the completion of the pre-operational tests was the fact that Ludington had not operated at all at high pond levels. The [REDACTED] is much more akin to the other self-constructed nuclear facilities discussed in Rev. Rul. 76-428 and PLRs 7920006 and 8525082. The unit was in the control of the utility. Initial fuel loading had taken place. Cold and hot system testing, and criticality had been achieved. Low power, off-grid testing had been completed. The full operating license had been granted. Synchronization took place on [REDACTED] to allow the unit to be brought up to rated capacity. Subsequent testing was in the nature of the Phase III sustained operation testing at the Ludington plant. Once the plant was synchronized the plant was in a state of readiness, and daily operation and distribution of electricity could take place.

Over the next five months the plant operated at increasing percentages of rated capacity. Operation at 80% and above continued without incident. Only when the facility reached 90% of rated capacity did the design flaw manifest itself, requiring plant shut-down. In the [REDACTED] Protest of [REDACTED], footnote [REDACTED], pg. [REDACTED], [REDACTED] describes the flaw as follows:

The problems caused by moisture carryover are generally nonlinear, i.e., they are relatively small until very close to full power and then become significant very quickly.

Such a description brings the term "latent defect" readily to mind.

The testing sequence of a nuclear generating facility is different from that of a hydroelectric plant. What may be determined by contract in the latter is closely controlled by the NRC in the former. Testing sequences of nuclear facilities have been discussed in the published positions discussed above, and critical testing has been found to be that which takes place before synchronization, at low power levels. The gradually

increasing percentages of rated capacity that can be achieved once a plant goes onto the power grid are considered tests for sustained output. On the other hand, pre-operational testing for the Ludington plant was the subject of the agreement between the parties, and was defined to include testing at three pond levels. Subsequent testing was to take place at the Ludington facility as well, operational testing to detect latent defects, but such continued operational testing would not postpone the placed in service date, once all the other necessary factors (such as control) were in place. At the [REDACTED], these factors were in place, and the off-grid tests were the critical, pre-operational tests. Post-synchronization testing was operational, to detect latent defects (such as the excessive moisture carryover that caused the shutdown). Moreover, to achieve the result the taxpayer is seeking a placed in service date later than [REDACTED] (the opening of the [REDACTED]-day window), must be found. The plant operated at [REDACTED]% capacity without incident between [REDACTED] and [REDACTED]. [REDACTED] would have us delay recognition of the placed in service date until a full [REDACTED] past this.

The malfunction requiring a shutdown at Ludington occurred at an earlier point in the sequence than did the malfunction at [REDACTED]. The necessary transfer of control (which in both cases was in the hands of the parties to determine) took place at an earlier point at [REDACTED] than it did at Ludington.

Service position with regard to the transfer of control in both these cases has done no more than to hold the parties to the agreements they reached. The determination that critical testing was complete at [REDACTED] by the date of synchronization is consistent with the prior published positions of the Service regarding testing sequences at nuclear generating facilities. Operation at rated capacity, or commercial operation (which is used in the contracts in Consumers Power to mean the availability for commercial operation at the successful completion of Phase II testing, and not in its industry sense of 100% of rated capacity and final acceptance) have never been required for a facility to be considered in service.

In sum, since the critical testing had been completed, necessary licenses were in place, and [REDACTED] had control of the facility on [REDACTED], when the unit was synchronized the facility was placed in service on that date. Synchronization being the last necessary factor before [REDACTED] [REDACTED] could be considered placed in service, we would litigate the position that the placed in service date will be the date on which synchronization took place.

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If we may be of further assistance, please do not hesitate to call Ms. Clare E. Butterfield, at (FTS)566-3442.

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